



Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.

SECTOR 10 — CHART INFORMATION

SECTOR 10

THE CALAMIAN GROUP AND ASSOCIATED DANGERS

Plan.—This sector describes the islands and dangers in the area between the NE end of Palawan and Mindoro, and Panay to the E. The sequence of description is from S to N.

General Remarks

10.1 The Calamian Group, Linapacan Island, and the Cuyo Islands, together with the numerous islets and reefs lying off them, lie approximately between latitudes 10°23'N and 12°29'N, and between longitudes 119°30'E, and 121°15'E.

These islands and islets together with Palawan form the major part of Palawan Province; they are also known as the Palawan Group and as the Palawan Archipelago. The latter designations are used most often in describing the winds, weather, and currents in the group as a whole.

The Calamian Group consists of three relatively large islands; Busuanga Island, Coron Island, and Culion Island, together with numerous off-lying islets and reefs.

The three large islands lie grouped around a position about midway between the SW coast of Mindoro and the NE end of Palawan. Mindoro Strait separates Mindoro and Busuanga Island.

Busuanga Island (12°10'N., 120°00'E.) is the largest island of the Calamian Group. It has a very irregular outline, its coasts being indented by an almost continuous succession of bays, in most of which are one or more islands or islets and rocks. The coasts of the island and these bays are nearly everywhere fringed by reef. Busuanga Island is hilly; the highest mountains are in the SE part of the island.

Mount Tundalara is an excellent landmark in that part of the island. Coron is the largest town on Busuanga Island. Other ports and anchorages of some maritime importance on the island are Port Caltom and Minuit.

Coron Island lies S of the SE end of Busuanga Island; the intervening channel is Coron Passage. The island is a rather rugged limestone mass that is high, rocky, and precipitous. Coron Island is almost barren and is practically uninhabited.

Culion Island lies close SW of the SW side of Busuanga Island, with numerous small islands and islets lying in the intervening channel. Like the others in the Calamian Group, the island is hilly and attains its maximum elevation in the SE part. Culion, in addition to being the largest town on the island, is also the site of a large leper colony.

Linapacan Island lies SW of the S extremity of Culion Island. The intervening channel is Linapacan Strait.

The Cuyo Islands lying SE of Busuanga and Culion Islands, are a large group of small, scattered islands that are generally wooded and hilly.

Reefs and shoals border the W sides of Busuanga and Culion Islands as far as 22 miles W. The 200m curve is the W boundary of the shoal area, but depths of less than 9.2m are found close within the curve. Vessels without local knowledge are advised to remain outside the 200m curve.

Drilling operations are progressing in 11°53'10"N, 119°21'32"E. A lighted buoy marks the location.

Winds—Weather.—In the Palawan Group, the Northeast Monsoon generally sets in during October, but does not become fully established much before the beginning of November. This monsoon, also called the winter monsoon, continues until April. The winds of this monsoon are N and NE, tending to become more easterly toward the close of the season.

When at maximum development, which is in January, the Northeast Monsoon blows with remarkable steadiness, averaging 10 to 15 knots over the open sea.

Stronger winds are generally associated with rising barometric pressures, but such conditions are of short duration, and become less frequent as the Northeast Monsoon draws to a close.

Interruptions to the normal monsoon winds are more frequent in the S part of this area than in the N part; they are associated with typhoons and shallow low pressure systems.

The Southwest Monsoon prevails from June to October; it follows a transition period of variable winds and calms.

The winds of this monsoon blow most steadily in July and August, but are not as steady as the winds of the Northeast Monsoon. The winds, when not interrupted by land masses, average 10 to 15 knots at the height of the monsoon. In the S part of the Palawan Group, in the latitude belt 8°00'N to 9°30'N, the close of the Southwest Monsoon season invariably brings strong, boisterous winds during the early days of October. A further transition period precedes the onset of the Northeast Monsoon again.

Squalls are somewhat prevalent during the Southwest Monsoon, particularly near land, and during such squalls the wind may attain gale strength in gusts. These squalls are often associated with thunderstorms.

Squalls and rain lasting for 5 or 10 days occur during the Southwest Monsoon. Fair weather, sometimes lasting at least a month, may be experienced between periods of bad weather.

Strong and squally SW or W winds, known locally as Collas, sometimes blow in summer and early autumn for periods as long as 10 days. They are generally observed with typhoons, centered some distance to the N, and at times in the S with shallow depressions. These Collas are generally accompanied by considerable quantities of close driving rain.

Land and sea breezes are clearly observable in this area, particularly when the prevailing NE or Southwest Monsoon winds happen to be weak. Along the E and W coasts of the island of Palawan, the winds of both the Northeast Monsoon and the Southwest Monsoon give place at sunset to a land breeze, known locally as the Tugpo. The Tugpo is observable as far as 10 to 15 miles offshore.

Typhoons are not very frequent over the greater part of the Palawan Group, although their frequency increases with increasing latitude. Only about 7 percent of the more serious typhoons occur in the latitude belt 8°00'N to 11°00'N, but in the

belt 11°00'N to 13°30'N, the region in which the Calamian Group is situated, typhoons are quite frequent and are often destructive, about 19 percent of all typhoons being experienced in this belt.

In a normal year 13 typhoons are encountered in the area 0°00'N to 20°00'N, and 120°00'E to 130°00'E, but about 50 percent of these begin to recurve to the N and NE before reaching the Philippines.

Tides—Currents.—The North Equatorial Current divides E of the Philippines and most of the water is deflected to the N and S. However, some of the water continues W to pass between the various islands.

During the Northeast Monsoon, this W drift current continues into the South China Sea, but during the Southwest Monsoon, this water becomes mixed, in the Sulu Sea, with water flowing E from the South China Sea. Most of the resultant mixed water turns S to flow into the Celebes Sea. Near shore and in the passes between the islands the tidal currents are often much stronger than the ocean currents and mask the effect of the latter.

Generally speaking, the currents of the South China Sea and the Sulu Sea need not be considered when navigating in close proximity to the Palawan Group.

Regarding sea conditions, the area described in this sector experiences medium to low seas and moderate to low swell, from NE, during the period from November to April. The most disturbed sea conditions occur during this period because wind velocities are higher than at any other time of the year.

During the period from May to October, sea and swell are predominantly from SW.

Waterspouts have been observed in the area between Palawan and the Cuyo Islands, and occasionally occur N of Tami Point in Ipolotte Bay.

Cuyo Islands

10.2 The Cuyo Islands lie between the N part of **Palawan Island** (11°25'N., 119°30'E.) and Panay Island.

They are contained within the parallels of 10°40'N and 11°30'N, and between the meridians of 120°40'E and 121°15'E. There are about 40 islands in the group, mostly scattered, except for the Quiniluban Islands.

Shoals, banks, and reefs are numerous in the vicinity of the Cuyo Islands.

However, most of the islands of the group can be approached without difficulty from any direction except the waters between **Cuyo Island** (10°50'N., 121°02'E.) and **Canipo Island** (10°59'N., 120°57'E.). These waters are encumbered with numerous shoals known as the Gosong Dangers.

The route E of the islands is generally used during the Northeast Monsoon from Basilan Strait to Mindoro Strait thus taking advantage of the N current along the W side of **Panay** (11°00'N., 122°00'E.).

The channel between the NE coast of Palawan and the Cuyo Islands is named Cuyo West Pass and that between the Cuyo Islands and Panay is Cuyo East Pass.

The Cuyo Islands are exposed to both monsoons. The mean annual temperature is about 28°C. and the entire area is considered excellent for working conditions.

Visibility is rarely obscured by fog or mist, but there are periods of haze during the Northeast Monsoon.

The Quiniluban Islands are the northernmost of the Cuyo Islands, and lie about 35 miles NNW of Cuyo Island. The group consists of several islands, islets, and rocks lying on a circular reef about 6 miles in diameter.

The group is of limestone formation, covered by tall grass. The reefs that encircle the islands are flat and sandy with numerous coral heads which dry at LW.

Breakers mark the edges of the reef during the monsoon seasons.

Anchorage, partly protected during the Northeast Monsoon (October to March), can be taken close off the SW side of the encircling reef, in depths of 11 to 27m.

Quiniluban Island (11°26'N., 120°50'E.), the largest of the group, lies near the NE edge of the reef. The island appears as a sharp cone on a N approach; whereas, from the E the island resembles a ridge with a dome-shaped elevation in the center.

The cone and ridge have a reddish brown color and make a prominent landmark. The island is a good radar target for a distance of 24 miles.

Quiniluban Island to Cuyo Island

10.3 Halog Islands (11°22'N., 120°52'E.) are two small islands rising from a reef about 3 miles SSE of the SE side of Quiniluban Island. The channel between the islands and Quiniluban Island is free of dangers and at least 10.9m deep.

A shoal, with a depth of 5.5m, lies 6.5 miles ESE of Halog Island. A steep-to reef, with a depth of 4.9m, lies 5.25 miles SW of the same island.

Pamalican Island (11°22'N., 120°44'E.) lies about 7 miles SW of Quiniluban Island. The island is covered with bushes and is uninhabited.

It is fringed by a drying reef extending 1 mile from its NE side.

Manamoc Island (11°18'N., 120°41'E.) lies 2.75 miles SW of Pamalican Island. The island is fringed by a partly drying reef which extends up to 1 mile offshore.

A lagoon, about 1m deep at LW, lies within a break in the reef on the SW side of the island.

A light is shown from a concrete tower, 12m high, standing on a hill on the W extremity of the island.

Lean Island (11°13'N., 120°41'E.) and Imaruan Island lie 4.75 miles S and 5.75 miles SE, respectively, of Manamoc Island. A 3.6m coral patch lies about 5 miles SE of Imaruan Island.

Oco Island (11°15'N., 120°51'E.), with a rock close off its E side, lies 10.5 miles ESE of Manamoc Island. Gosong Rocks, 5m high, lies 3.75 miles SE of Oco Island.

Dit Island (11°15'N., 120°56'E.) lies about 4.3 miles E of Oco Island. The island is wooded and has three mountain peaks in the middle part of the island.

Large boulders form the shores but small sandy beaches are found at the S and W ends of the island.

Shoal patches lie as far as 1 mile off the SW side of the island.

10.4 Maracanao Island (11°13'N., 121°04'E.) is located on a bank, with depths of less than 18m. The island lies 7 miles E of Dit Island.

Chinaman Shoals are two shoals, with depths of 6 to 7m, lying 3.5 and 6 miles NNE, respectively, of Maracanao Island. Luzon Bank, with a least depth of 14.6m, lies 11 miles E of Maracanao Island. Several smaller banks, with depths of 13 to 17m, lie between Chinaman Shoals and Luzon Bank.

Agutaya Island (11°09'N., 120°58'E.) lies about 4.5 miles SSE of Dit Island. The island is high and hilly in its NE part with four peaks rising close together. Extensive coral reefs, bare at LW, extend as far as 0.4 mile off the NW and SE sides of the island.

Agutaya Island Light is shown at the W side of the island.

A small detached coral reef, with a depth of 3.7m, lies 8 miles W of Agutaya Island.

Guinlabo Island lies near the E edge of a shoal, 2.25 miles S of Agutaya Island. A rock, with a depth of 1.2m, lies 3.75 miles W of Guinlabo Island.

Matarabis Island (11°07'N., 121°09'E.) lies on the S side of a bank with depths of less than 18m, 9.5 miles E of Agutaya Island.

The island is easily identified by its steep conical hill, which is the most prominent landmark in the Cuyo Islands. The island is a good radar target up to 27 miles.

A shoal, with a depth of 10.4m, lies about 3 miles WNW of Matarabis Island.

10.5 Siparay Island (11°02'N., 121°08'E.) lies about 5 miles S of Matarabis Island. Tacubuc Island lies about 3 miles SW of Siparay Island. Both islands lie on banks, with depths of less than 18m.

Tagauayan Islands (10°58'N., 121°13'E.), consisting of two islands, lie about 6.5 miles SE of Siparay Island.

The two islands are connected by a drying ledge. The larger of the two islands has three conspicuous high ridges; the highest is reported to be visible for 23 miles. Both islands are reported to be good radar targets up to 25 miles.

Tagauayan Bay (10°58'N., 121°14'E.) is the area between the two islands lying NE of the rocky ledge connecting them. The bay is open to the E but affords good shelter during the Southwest Monsoon.

A number of hills and a large sharp rock on the above ledge are good landmarks for entering the bay.

A shoal ridge in the middle of the bay extends 0.5 mile E from the shore and has a depth of 4.9m. Fair shelter from the Northeast Monsoon can be obtained on the N side of the bay.

Anchorage can be taken in the N part of the bay, in depths of 14.6 to 18.3m. Anchorage can also be taken off the W side of the bay, in depths of 18.3 to 27m, about 0.2 mile off the shore, and 0.35 mile SW of the N entrance point S of the rocky ridge is an area about 0.2 mile in extent, with depths of 11 to 22m, where anchorage is available in fair weather.

Cocoro Island (10°53'N., 121°12'E.) lies 4 miles SSW of the Tagauayan Islands. The island is fringed by a reef, except on its S side, and a bank extends about 0.5 mile NW from its N extremity, with depths of less than 5.5m. It has been reported the island is a good radar target up to 24 miles.

10.6 Cuyo Island (10°51'N., 121°02'E.) is the largest of the Cuyo Islands and lies about 7 miles WSW of Cocoro Island. The N and S parts of the island are connected by a low, narrow isthmus. Mount Bombon, the highest hill on the island, stands in the N part of the island.

The S coast of the island is composed of low, rocky ledges or mangroves with trees along the beaches. Lucbuan Hill, on the E side of the island, is a good landmark when approaching the island from the E. The island has been reported to be a good radar target up to 31 miles.

Cuyo (10°51'N., 121°00'E.) ([World Port Index No. 59220](#)), the largest town in the Cuyo Islands, stands on the W coast of Cuyo Island. Buoys mark the N and S entrance points to the port.

The entrance channel at the buoys is 7.3m deep and 0.25 mile wide. Depths decrease to 1.5m off a pier at the inner end of the channel. A light is shown near the middle of the pier.

Cuyo is approached from N or W through a channel between the N side of Bisucay Island and the SW extremity of Gosong Dangers. This channel is at least 0.5 mile wide with depths of 18.3 to 31m.

Bisucay Channel, between Bisucay and Cuyo Islands is 0.3 mile wide, with a fairway about 0.1 mile wide and 11.9m deep.

The immediate approach to town is through a break in the reef abeam of it. There are numerous shoal patches lying adjacent to the channels.

There are two piers at Cuyo. The stone mole, about 0.15 mile long, has a reported depth of 2.1m off its head. The stone causeway extends almost 0.4 mile offshore, with its outer 40m submerged 0.3m below water. The remaining part of the causeway is in disrepair and used only by small boats.

Small vessels can anchor about 0.5 mile W of the pier, in 7.3m, or closer in if draft will allow. During the Southwest Monsoon (May to September), vessels can anchor closer off the reef that fringes the N side of Bisucay Island.

Anchorage can also be taken during SW storms in the bay on the SE side of Cuyo Island.

Islands West of Cuyo Island

10.7 Bisucay Island (10°49'N., 120°58'E.) is separated from the SW side of Cuyo Island by Bisucay Channel. A double-peaked hill rises in the middle of the island. The NE side of the island is low and sandy.

Batas Point, on the SE side of the island, has a hill which is a good landmark for vessels approaching the S entrance to Bisucay Channel.

Gosong Dangers (10°54'N., 120°59'E.) is an extensive area of foul ground and detached shoal patches which lies W of Cuyo Island. Gosong Rock, 3m high, lies on the E side of Gosong Dangers.

Indagamy Island, 40m high, is steep and rocky; it lies 1.25 miles ENE of Gosong Rock.

Putic Island, 1.25 miles E of Indagamy Island, is 128m high; it lies on the reef, which dries, about 0.4 mile NW of the N part of Cuyo Island.

Bararin Island (Bararing) (10°52'N., 120°56'E.) lies 3 miles NNW of the NW extremity of Bisucay Island. The island is steep-to on its W side. Pandan Island lies on the SE part of a detached bank, 4.5 miles W of Bisucay Island.

Imalaguan Island (Imalauan) (10°45'N., 121°04'E.) lies 3 miles S of the SE extremity of Cuyo Island. The island consists of three hills which are covered with vegetation. Silat Island lies about 6 miles S of Bisucay Island. The island is wooded and inhabited.

10.8 Capnoyan Island (10°44'N., 120°54'E.) lies about 5.5 miles SW of Bisucay Island. The island is high and wooded on its SW side. A narrow reef fringes the island except for a short stretch on its SW side. Malcatop Island lies about 1.3 miles SSW of Capnoyan Island.

The island has two summits and is partly cultivated. Pangatatan Island lies 0.5 mile S of Malcatop Island. The island has a sandy beach on its NE side and the rest is covered with bamboo and scrub.

Pacheco Shoal (10°40'N., 120°52'E.), with a depth of 6.4m, lies about 1.8 miles SSW of Pangatatan Island. Ramon Shoal, with a depth of 4.5m, lies 4 miles W of the same island.

Santa Filomena Shoals (10°39'N., 120°44'E.) consists of three coral formations and lies at the SW end of the Cuyo Islands group.

There is deep water between the three shoals. The shoals, which have least depths of 2.1 to 3.6m, can best be seen on the chart.

10.9 Quiminatin Island (10°43'N., 120°47'E.) lies 6 miles W of Capnoyan Island. It rises abruptly and is almost inaccessible and the cliffs are undercut by the sea. The NW corner is separated from the remainder of the island by a deep saddle, and the W side of this point is the only landing place.

Quiminatin Chico Islands (10°43'N., 120°46'E.) comprises two islets on the E edge of a bank, 1 mile WSW of Quiminatin Island.

The channel between the islets and Quiminatin Island is deep and clear.

Round Island (10°48'N., 120°36'E.), the westernmost of the Cayo Islands, lies about 11.5 miles WNW of Quiminatin Island. The island is steep-to and partly wooded. Lubic Island lies 11.5 miles NNE of Round Island.

The island is hilly and has a coconut plantation on its S end. Tabac Rock, with a depth of 0.3m, lies 5.5 miles WNW of Lubic Island. The rock lies on the S end of a partly drying coral reef.

An isolated rock, with a charted depth of 4.9m, lies 4.5 miles SW of Lubic Island.

Pamitinan Island (11°00'N., 120°46'E.), Patunga Island, and Paya Island all lie in a NE-SW direction, about 2.5 miles apart, and steep-to. Cauayan Island lies about 7 miles NNE of Tabac Rock. A shoal, with a depth of 14m, lies 3.5 miles NW of Cauayan Island.

The Calamian Group

10.10 The Calamian Group consists of three relatively large islands; Busuanga Island, Coron Island, and Culion Island, together with numerous off-lying islets and reefs.

The islands are generally hilly and the lower slopes and valleys are wooded.

The climate of these islands is generally hot and unhealthy. Depths N and E of the islands are very irregular with patches from 13 to 18m rising steeply from greater depths.

Busuanga Island

10.11 Busuanga Island (12°10'N., 120°00'E.) is the largest island of the Calamian Group. The coasts of the island and its bays are fringed by reefs. The highest mountains are in the SE part of the island.

Mount Tundalara is the highest of these mountains and is very prominent, but is sometimes obscured by clouds. A number of towns and villages are located about the island.

Macachin Point (12°20'N., 119°54'E.), the N extremity of Busuanga Island, is low, rocky, and reef-fringed. Northwest Rock, with a flat summit, is barren, has a dark appearance, and lies almost 5 miles NNW of Macachin Point.

Sail Rocks, a group of bare rocks, lie 2 miles SSE of Northwest Rock. A bank, with a depth of 12.8m, lies 1.5 miles NE of Sail Rocks.

Dimipac Island (12°22'N., 119°54'E.), with a few trees and some vegetation, lies about 2 miles N of Macachin Point. The island is mainly fringed by a drying reef.

The NW end of Busuanga Island is locally known as Calauit Island, as it is separated from the mainland by the Ditipac River which flows through the narrow neck connecting them.

Inagtapan Point (12°19'N., 119°55'E.) lies about 2 miles ESE of Macachin Point. The point is bold, rocky, and steep, with a high bare cliff. A low ridge extends from the point SW to the W coast of the island.

10.12 Tanobon Island (12°21'N., 119°57'E.), high and wooded, lies 2 miles NE of Inagtapan Point.

Tanobon island is also reported to be fringed by a coral reef. Two rocks lie 1 mile WNW of the SW extremity of the island. Dumunpalit Island lies 12 miles NE of Inagtapan Point. The island is rocky and encircled by a reef.

Colocoto Rocks, a group of large black boulders, lie about 7 miles NW of Dumunpalit Island.

Calauit Bay (12°16'N., 119°56'E.) lies about 2.8 miles SSE of Inagtapan Point. The bay has irregular depths of 6 to 37m and is open to the Northeast Monsoon. A village of the same name stands on the N shore of the bay.

The shores of the bay are fringed by coral reefs. Part of the year a fishing fleet is reported to be operating out of the bay.

Minuit (12°15'N., 120°01'E.) is situated on the coast 7.5 miles SE of Inagtapan Point. It is a small open bight with depths of 9.1 to 22m.

It is exposed to N winds, but the E part of the anchorage is protected from NE, E, and S winds by an extensive reef and off-lying islands.

Minuit, a village, stands on the shore S of the anchorage. A wooden pier in ruins, at the SW side of the anchorage, is a good landmark on approaching the anchorage.

Anchorage can be taken, in 14.6 to 16.5m, mud, about 0.3 mile NE of the pier.

Diboyoyan Island (12°16'N., 120°06'E.) lies 5 miles ENE of Minuit. Dimaquiat Island and Malpagalen Island are connected together by an underwater ridge of sand and coral. Shoals are

scattered between the above islands and the coast of Busuanga Island.

10.13 Port Caltom (12°11'N., 120°06'E.) lies about 6 miles SE of Minuit. The port consists of an irregularly shaped bay, about 1 mile in extent, which affords good protected anchorages in several bights.

A brown hill on the N side of the entrance is a good landmark. A long narrow coral reef extends about 0.5 mile from the head of the port towards the middle of the entrance, with a deep passage on either side.

Sheltered anchorage can be obtained in an area of about 0.2 mile in extent, in depths of 11 to 20m, located W of a stone mole, in ruins on the E shore.

A vessel can also anchor in the N part of the bay, where there is a depth of 36.6m, about 0.1 mile offshore and 0.3 mile SW of the brown hill.

Directions.—From a position about 1 mile E of Malpaglen Island, steer 180° until the rocky point on the N side of Port Caltom bears 270°, distant 0.5 mile. Change course to 246° for the mouth of the **Panguaran River** (12°11'N., 120°06'E.), and when the entrance point of the river is abeam, change course to 217° for the anchorage.

The channel is about 91m wide at the entrance, and the W side should be favored as there are shoals off the E side.

The anchorage in the N part of the bay is easy of access and can be approached by keeping about 0.1 mile off the N shore.

10.14 Aram (12°07'N., 120°10'E.) lies about 6 miles SE of Port Caltom. A pier in ruins lies off the village.

A beacon marks a 0.9m patch lying 0.5 mile NW of the pier. A second beacon marks the edge of a reef W of the pier.

Coconongon Point (12°14'N., 120°13'E.) is located 7 miles ENE of Port Caltom. The point is the steep, rocky, and cliffy N end of a peninsula. A rock, 2m high, lies about 1 mile NW of the point.

A mountain, rising just within the point, is a prominent cone-shaped wooded landmark.

Cabilauan Island (12°10'N., 120°10'E.) lies in the bay between Coconongon Point and Port Caltom. A number of islands and several below-water reefs lie between the SW side of the island and the coast.

Good anchorage can be taken off the SE end of the island, in depths of 12.8 to 26m, subject to weather and visibility.

Several islets and numerous rocks lie between this island and Busuanga Island. From N to SE the principal islets are: Dicapadiac Islet, 68m high, Dimalanta Islet, 87m high, Lait Islet, 83m high, and Liatui Islet, 62m high.

10.15 Nanga Islands (12°20'N., 120°16'E.), two in number, lie about 7.5 miles NNE of Coconongon Point. The islands are hilly and encircled by coral reefs and detached rocks. The channel between the islands is foul, but can be used by small craft at HW.

A rocky islet lies 1 mile NE of the N Nanga Island.

Camanga Island (12°18'N., 120°16'E.) lies about 2 miles S of the S Nanga Island. The island is wooded and fringed by coral reefs as far as 0.1 mile offshore. A bold rock lies 0.5 mile off the W side of the island. A steep-to rock, awash, lies almost 0.5 mile NE of the island.

Tara Island (12°17'N., 120°22'E.) lies about 4.5 miles ESE of the Nanga Islands. The island is made up of light brown-colored hills, bare of trees, and appears as a number of islands when seen from the offing.

The W shore of the island is a sandy beach, bound by a wide coral reef. The E shore is rocky with steep bluffs.

Anchorage can be taken off a village on the W side of the island, in depths of 18.3 to 31.1m.

Lagat Island (12°15'N., 120°22'E.) lies about 0.75 mile SW of Tara Island. The island is barren and fringed by a coral reef. The island is also very steep and has nearly bare eroded cliffs, which show red or white through sparse vegetation.

The channel between the island and Tara Island is 0.5 mile wide and clear of dangers except for a 2.1m patch off the N end of Lagat Island.

Bantac Island (12°13'N., 120°23'E.) lies about 2 miles SSE of Tara Island. The island is connected to Calanhayaun Island by a drying coral reef. Both islands are dark-colored except during bright sunlight when they show up as red and yellow. A light is shown from the SW end of the island.

Lubutglubut Island (12°11'N., 120°23'E.) is situated about 1 mile SW of Calanhayaun Island. The island appears dome-shaped from the E and is a good landmark.

Brown Rocks are dark, bare, and lie about 1.3 miles to the S of Lubutglubut Island.

10.16 Depagal Island (12°10'N., 120°15'E.) lies about 4 miles SE of Coconongon Point. The island is connected by a reef to Napuscud Island, close S of it. There are high peaks in the middle of both islands.

Minangas Bay (12°08'N., 120°15'E.) lies on the NE side of Busuanga Island, close S of Napuscud Island. The entrance to the bay is about 0.5 mile wide and can be identified from a distance by several long reddish-brown scars, where small landslides have occurred, on the E end of Napuscud Island.

Shoals of 0.5m and 2.2m, lying S and SE of the S end of Napuscud Island, are in the middle of the bay.

Anchorage can be obtained about 0.3 mile NW of the S end of Napuscud Island, in a depth of 22m, mud.

Directions.—From a position about 0.3 mile E of the NE point of Napuscud Island, steer a course of 218°, which leads midway between the island and the 2.2m shoal patch.

Keep within 0.1 mile of the E side of Napuscud and round the S end of the island and anchor W. The shoal patches are visible or show discolored water.

10.17 The coast between Minangas Bay and Alonon Point, 7 miles SE, consists of high, cliffy points with low, mangrove bights.

Mount Minangas (12°05'N., 120°18'E.) is the highest and northernmost of three peaks close together, which form part of a saw-tooth range extending SE from the bay.

Anchorage for small vessels can be taken during the Southwest Monsoon in small bays lying SE of **Demelias Island** (12°06'N., 120°18'E.) and NW of **Salung Island** (12°05'N., 120°20'E.). The first bay has depths of 18 to 53m SE of the island; the second bay has depths of 15 to 24m over a width of 0.25 mile.

Alonon Point (12°03'N., 120°20'E.), the E extremity of Busuanga Island, is reef-fringed and backed by hilly terrain.

Lungaon, a large fishing village, lies on the N shore of a bay, 1.5 miles N of Alonon Point.

Mount Tundalara (12°02'N., 120°15'E.), 464m high, the highest summit on Busuanga, is conspicuous except when obscured by clouds.

Port Borac (12°03'N., 120°19'E.), a small inlet, lies about 1.5 miles SW of Alonon Point. The inlet is about 0.3 mile wide at its entrance, with a depth of 24m, decreasing to 6.7m at its narrowest part. The inner basin is filled with mud flats. There are two piers in ruins.

Bocao Point (12°00'N., 120°20'E.), the SE extremity of Busuanga Island, is rocky and encircled with coral reefs for a distance of 0.3 mile. Two rocky islets lie near the outer edge of the reef.

Dinaran Island lies about 1.5 miles E of Port Borac. The channel between the island and Busuanga Island is deep except for a 3.2m patch lying 0.5 mile E of Alonon Point.

10.18 Mataya Reef (12°01'N., 120°22'E.) lies close E and SE of Dinaran Island.

The reef consists of coral and sand, and partly dries at LW. A small island lies on the E side of the reef. Vessels should stay at least 2 miles off the island.

The narrow channel between Dinaran Island and the reef has a controlling depth of 16.5m, but is not recommended due to shoals near the S end.

Dibatuc Island (11°58'N., 120°19'E.) lies about 1.8 miles SW of Bocao Point. The island is high and rocky on all sides. It has very little vegetation and is uninhabited.

The island is a good landmark when entering the E end of Coron Island.

Coron Island (11°55'N., 120°15'E.) lies close S of Busuanga Island. The island is high, rocky, and very precipitous. The E side of the island is indented by several small and unprotected bays, which are used mainly by fishermen.

Calis Point, the S extremity of the island is steep-to and formed by a high vertical cliff with an overhanging base caused by erosion. A bay, situated 2.5 miles NNW of the point, is about 0.3 mile in extent with depths of 13 to 24m, but the entrance is constricted and has a depth of 7m. The basin just N of Calis Point is obstructed by a sand bar. A ridge, containing shoals, extends about 6 miles NE from the E coast of Coron Island.

10.19 Balolo Point (11°57'N., 120°11'E.) forms the NW extremity of Coron Island. The point is fringed by reefs and should not be passed less than 0.25 mile off.

Between Balolo Point and Limaa Point, the coast is rugged, steep, and mostly indented. There are some sandy beaches where boats can land.

Coran Reef (11°53'N., 120°12'E.) lies about 2.5 miles off the SW coast of Coron Island. The reef lies at the N end of an underwater ridge extending SE on which there are several shoals. The reef is awash at LW.

Delian Island (11°50'N., 120°19'E.) lies about 3 miles E of the SE coast of Coron Island. The E side of the island is rocky and indented. An islet lies off the S extremity of the island. The island has been reported to be a good radar target up to 21 miles. A light is shown from SE end of the island.

10.20 Alpha Shoal (11°52'N., 120°23'E.), with a least depth of 5.8m, lies about 4 miles E of Delian Island. Shoal water lies close N and S of Alpha Shoal.

Magallanes Bank (11°51'N., 120°26'E.), with a least depth of 6.7m, lies about 6.5 mile E of Delian Island.

Narvaez Bank, about 0.8 mile long and with a least depth of 6.4m, lies about 3 miles S of Magallanes.

Aguirre Reef (11°44'N., 120°34'E.), with a least depth of 5.5m, lies about 9 miles ESE of Narvaez Bank.

Beta Shoal, with a least depth of 8.5m, lies about 6.7 miles SSE of Delian Island.

Areta Shoals (11°39'N., 120°47'E.) consists of a 9.1m patch, lying about 15.5 miles ESE of Aguirre Reef and a 10.3m patch about 3 miles SW of the above patch.

Cabulauan Islands (11°25'N., 120°08'E.) consist of a group of five islands that lie between Salimbubuc Island and Alipio Reef. The group consists of Cabulauan Island, Nanga Island, Nangalao Island, Magranting Island, and Tubug Island.

The islands are all high, rocky, sparsely wooded, and rather steep-to.

10.21 Cabulauan Island (11°23'N., 120°06'E.) has a conspicuous round summit near its E shore. Two rocky islets lie close together about 1.3 miles S of the island.

A detached 6.7m shoal lies 2.5 miles SE of the islets and an 8.2m patch lies 3.5 miles NE of the islets.

Panay Bank (11°33'N., 120°20'E.), with a depth of 12.8m, lies about 18 miles ENE of the N extremity of Nangalao Island.

Loreto Reef (11°30'N., 120°11'E.), with a least depth of 6.4m, lies about 1.8 miles N of the N end of Nangalao Island. Bache Reef, a coral head, lies about 3.3 miles NNE of Loreto Reef, and has a least depth of 4.5m. An 8.5m coral shoal, with a dangerous wreck, lies about 4 miles NE of Bache Reef.

Tuna Reef (11°36'N., 120°12'E.), with a least depth of 5.5m, lies about 3 miles N of Bache Reef.

Alipio Reef (11°30'N., 120°04'E.), with a least depth of 7.6m, lies about 6.75 miles WNW of Nangalao Island. Basco Reef, 1.25 miles NE of Alipio Reef, has a least depth of 7.3m. Sambino Reef, with a depth of 8.5m, lies about 3.75 miles W of Alipio Reef.

Salimbubuc Island (11°18'N., 120°14'E.) lies about 9.5 miles SSE of the E extremity of Nangalao Island. Depths of 11 to 18.3m are found on a bank which extends 1.5 miles N from the island.

Solitario Rock (11°17'N., 120°20'E.), lying about 5.3 miles E of Salimbubuc Island, is steep-to and round-topped.

Canaron Island lies about 4 miles SE of Salimbubuc Island.

The island lies on foul ground which extends 0.75 mile N of the island. High rocks rise from the foul ground area and also lie as far as 0.5 mile S and SE of the island.

Patterson Reef (11°13'N., 120°08'E.) lies about 8.5 miles WSW of Canaron Island. There is a least depth of 2.1m at the reef. The reef is 0.5 to 0.75 mile in extent.

Linapacan Strait

10.22 Linapacan Strait (11°37'N., 119°57'E.), deep and clear of dangers, lies between the S end of the Calamian Group and the group of islands off the N end of Palawan.

The strait is about 3 miles wide between Dicabaito Island and Dicapululan Island.

The strait has depths of over 55m in the fairway. Tidal currents, with a speed of up to three knots, set ESE on the flood and WNW on the ebb. Tide rips are experienced in the strait.

An offshore platform stands in approximate position 11°59'N, 119°18'E, 38 miles WNW of the strait.

Binalabag Island (11°35'N., 119°56'E.) lies on the S side of Linapacan Strait, about 1.5 mile SE of Dicapululan Island. The island is fairly steep-to on its E side.

Depths of less than 11m extend 0.3 mile from its NE side.

There is partially sheltered anchorage for small craft in a bay on the S side of the island.

Pangaldauan Island (11°36'N., 119°52'E.) lies on the S side of the approach to the W entrance of Linapacan Strait. The island is rocky and has some prominent cliffs. Boulders lie on a reef which fringes the island. Beacon Rocks, a cluster of steep-to rocks, lies about 0.8 mile N of Pangaldauan Island.

Dimanglet Island (11°33'N., 119°49'E.) lies about 4 miles SW of Pangaldauan Island. The island has two peaks, separated by a low neck. The red cliffs of the W and highest peak are prominent from the W.

Inapupan Island (11°33'N., 119°51'E.) lies 1.5 miles E of Dimanglet Island. Bolina Island and Manlegad Island lie 0.75 mile NE and E respectively, from Inapupan Island. A number of small islands lie farther E of the above islands.

Culion Island

10.23 Culion Island (11°50'N., 120°00'E.), the second largest island of the Calamian Group, is separated from Busuanga Island by a navigable strait 3 to 4 miles wide. Small islands in the strait constrict the channel to 0.5 mile at its narrowest part.

The N and E sides of the island are very irregular, whereas the W side is regular with steep and rocky projecting points. Mount Oltaloro, the highest peak on the island, stands near the SE end of the island.

Culion Reservation, for the segregation of lepers, consists of Culion Island and adjacent smaller islands. It is unlawful for any vessel to visit these islands or to land without permission from the Chief of the Culion Leper Colony, Bureau of Health.

10.24 Port Culion (11°53'N., 120°01'E.) ([World Port Index No. 59260](#)) lies on the NE side of Culion Island. The port is a narrow inlet about 0.1 mile wide and 0.5 mile long, and opens into Coron Bay.

There are depths of 14.6 to 18.3m in the middle of the inlet, with depths of 30m or more in the outer harbor and approaches. A drying reef is marked by a beacon on each side of the entrance. A light is shown on the NW entrance point. A pier is situated near the light.

A small wooden pier stands 0.5 mile W of the above light. The head of this pier had a reported depth of 9.4 to 10.1m. Three fixed red lights are shown near the root of the pier from 1800 to 2200 hours.

Anchorage can be taken, in depths of 27 to 33m, about 0.3 mile NE of the above pier. Small vessel can find anchorage within the inner harbor of Port Culion.

Vessels should approach the pier from the NE and maneuver to go alongside port side to. Small vessels, with a maximum draft of 3.1m, can berth alongside the outer face of the pier. Larger vessels should approach the pier with caution and anchor well off its face.

West Linapacan Oil Terminal (11°49'N., 119°07'E.), a floating production and storage tanker, is moored about 45 miles W of Culion Island. Vessels should send their ETA 72, 48, 24, and 4 hours in advance; the ETA should be confirmed 24 and 4 hours in advance, or if the ETA changes by more than 1 hour. The terminal should be called on VHF channel 16 when within 4 hours of arrival. The pilot boards 2 miles W of the terminal. A restricted area, best seen on the chart, surrounds the terminal.

10.25 Numerous islands lie off the NW, N, NE, and SE coasts of Culion Island. Relative positions, one to each other, are best seen on the chart.

Popototan Island (12°00'N., 119°51'E.) lies off the NW coast of Culion Island. The shores of the island are fringed by coral reefs which bare at LW.

Foul ground extends as far as 1.25 miles NE and SW of the island. The channel between Popototan Island and Galoc Island has a navigable width of 0.25 mile and depths of 9.6 to 16.5m. Anchorage for small vessels can be taken anywhere in this channel.

Galoc Island (11°57'N., 119°50'E.) lies with its NW extremity 0.5 mile S of the S side of Popotoan Island. The island is about 5 miles long and is narrow. It is reef fringed, with steep cliffs on several salient points. The constricted channel between the island and Culion Island is foul and is not recommended.

Calumbuyan Island (12°01'N., 119°56'E.) lies about 4 miles ENE of the E end of Popototan Island. The island is fairly steep and fringed by a narrow coral reef which can safely be passed about 0.2 mile off.

The channel between this island and Lajo Island is deep and free of dangers. It is the preferred channel on a W approach to Coron Bay. A ruined pier lies on the SE side of Calumbuyan Island.

Lajo Island (11°59'N., 119°57'E.) lies about 0.8 mile S of Calumbuyan Island. Lajo Island, Marily Island, and Chindonan Island, all lying S of the main channel, have several smaller islands adjacent to them.

Manglet Island (11°59'N., 119°57'E.), lying on the S side of the main channel to Coron Bay, is steep-to on all sides and has several summits. S of the island is the entrance to a large, irregular bay formed by several islands.

10.26 Dunaun Island (11°52'N., 120°05'E.) lies close off the E extremity of Culion Island. The two islands are connected by a coral reef.

Several detached rocks and coral reefs, above and below-water, lie SE of Dunaun Island and at the W side of Coron Bay.

Tampel Pass (11°47'N., 120°07'E.) lies between the NW side of Bulalacao Island and the SE side of Malcapuya Island.

The passage is deep, free of dangers, and at least 0.75 mile wide.

Bayuan Bay (11°47'N., 120°09'E.), indenting the N side of Bulalacao Island, has shores fringed by reefs and fronted by shoals. The outer part of the bay is deep and clear of dangers.

Anchorage can be taken, in depths of 11 to 25m, in the E part of the bay sheltered from the Southwest Monsoon (May to September) and partially sheltered from the Northeast Monsoon.

Guintungauan Island (11°46'N., 120°13'E.) lies about 1 mile E of the E side of Bulalacao Island. The island is rocky and fringed by a coral reef. Vessels entering Coron Bay should pass at least 1.5 miles off Guintungauan Island.

Lapulapu Reef, with a least depth of 2.7m, lies about 7.5 miles S of Bulalacao Island. Tres Reyes are four steep-to rocky islets lying 3.5 miles NW of Lapulapu Reef.

Coron Bay (11°54'N., 120°07'E.) lies between Culion Island, Busuanga Island, and Coron Island. This wide bay has three main entrances. These channels are the N, W, and S entrance channels.

The S entrance channel lies between Calis Point and Guintungauan Island. It is about 3 miles wide, deep, and clear of dangers. Vessels should favor Calis Point, giving it a berth of about 1 mile. The N and W channels are discussed in other places.

Coron Light (11°59'N., 120°13'E.) stand on a point of land about 0.8 mile W of East Maquinit Island.

Anchorage can be taken throughout the bay, but protected anchorage for smaller vessels may be taken in Port Uson, Dipulao Cove, and Coron Harbor.

Culion Island—Southwest Coast

10.27 Dicabaito Island (11°39'N., 119°58'E.), lying close off the S end of Culion island, is steep, rocky, and irregularly shaped, with high cliffs. The island is a good landmark. Dicabaito Channel lies between the island and Culion Island.

The channel has a navigable width of 0.1 mile with a depth of 18.3m in the fairway. Anchorage, in the outer part of a bay indenting the N coast of Dicabaito Island, can be taken in depths of 12.8 to 16.5m, sand. A light is shown from the SSW end of the island.

Alava Island (11°44'N., 119°56'E.) lies about 4.5 miles NNW of the NW extremity of Dicabaito Island. The island is high, rocky, and steep, tapering to a sharp point at its S end. The island is surrounded by large boulders, with several high islets lying on foul ground which extends S from the island.

10.28 Halsey Harbor (11°46'N., 119°58'E.) is an irregularly shaped bay which indents the SW coast of Culion Island for 5 miles in a NE direction. The head of the harbor branches into North Arm and East Arm, with several islands between them. The N and NE parts of North Arm and the whole of East Arm are shallow.

South Channel, the S entrance to Halsey Harbor, leads between Alava Island and the main coast. The channel has a navigable width of 91m and a depth of 24m. Research Channel, the entrance channel N of Alava Island, has a navigable width of 0.5 mile with depths of 38 to 48m.

Anchorage can be taken, in 27m, in the middle of the S part of the bay, about 0.4 mile SE of the E point of Gage Island.

Sheltered anchorage can be taken, in 24m, mud, N of the highest hill on Gage Island. Halsey Harbor, protected from all winds, is a designated typhoon anchorage.

Directions.—From a position 0.4 mile S of the S rock lying on foul ground off the S end of Alava Island, steer 025°, in mid-channel, for the 156m hill near the N shore of the channel.

When the 134m hill on Rhodes Island bears 095°, change course to 065°. When the W tangent of Gage Island bears 000°, change course to 030° with the E point of the island ahead.

Vessels entering the harbor via Research Channel should clear Saddle Rock by at least 0.5 mile, and bring the 134m hill on Rhodes Island between the two peaks of Mount Maus on a 095° bearing and steer on this bearing.

When the 156m hill on the N side of the channel bears 025°, change course to 065° and follow the directions for South Channel.

Saddle Rock (11°46'N., 119°53'E.) lies about 2 miles W of the N entrance point of Halsey Harbor. It has the appearance of a saddle when viewed from N or S. Two rocks, awash, lie on the E side of the bank 0.5 mile E of Saddle Rock.

Busuanga Island—South and West Coasts

10.29 Coron Passage (11°59'N., 120°15'E.) separates the N coast of Coron Island from the SE coast of Busuanga Island. The passage is about 0.5 mile wide at its narrowest point. Depths are variable, with a least depth of 26m in the fairway. Currents, generally weak, set E and W on the flood and ebb. A 3.6m patch lies about 0.8 mile E of Limaa Point.

East Maquinit Island (11°59'N., 120°14'E.) lies in Coron Passage, 0.5 mile SW of Limaa Point. The island divides the passage into two channels, each about 0.5 mile wide.

The Maquinit Islands, lying 0.5 mile WNW of East Maquinit Island, consists of several islets in a compact group which are surrounded by a reef with 4.1m depth.

These dangers can be avoided by keeping close to East Maquinit Island. A shoal, with a depth of 4.1m, lying about 0.5 mile SE of Coron Point, consists of live coral and should be avoided. Other unmarked shoals are charted as far as 1.25 miles SW of the point.

A finger reef extending off the SE end of **Uson Island** (11°59'N., 120°10'E.) is not easily seen at HW.

Directions.—Foreign vessels calling at Coron or at ports in Palawan and intending to use this passage should obtain the services of a pilot from Manila.

When approaching Coron Passage from the E, pass 2.5 miles E and S of **Mataya Island** (12°01'N., 120°23'E.), then pass close N or S of Dibutac Island. Then, while keeping close to the NE side of Coron Island, round Limaa Point at a distance of 137m.

Then steer to pass the same distance NE of East Maquinit Island.

If proceeding through Coron Passage, steer to pass 0.1 mile SE of the reef, awash, extending SE from the SE extremity of Uson Island, and then the same distance NW of the reef off **Balolo Point** (11°57'N., 120°12'E.).

If bound for Coron, after passing East Maquinit Island, and when **Coron Point** (11°59'N., 120°13'E.) bears 000°, steer on a course of 314°. This will lead to the outer anchorage.

10.30 Coron Harbor (12°00'N., 120°12'E.) ([World Port Index No. 59240](#)) is formed between the S coast of Busuanga Island and the NE coast of Uson Island. The harbor is approached through a narrow passage marked by beacons, leading through the dangers off the E end of Uson Island.

Coron (12°00'N., 120°12'E.), the principal town on Busuanga Island, is situated about 1.5 miles NW of Coron Point. Access to the port is through Coron Passage.

A T-shaped pier, with a berth 24m in length, depths of 3.7 to 4.9m alongside its face, and 4.9 to 8.5m about 6m off the face, lies 0.5 mile SE of the town.

A reef close SE of the pier head extends 150m from the shore. A stake usually marks its extremity. A white church spire is a good landmark in Coron.

Pilots may be obtained from Manila. Vessels usually anchor about 0.3 mile S of the pier, in depths of 18.3 to 22m, mud. This anchorage is constricted and untenable in heavy weather. A more sheltered anchorage is available W of town and midway between Canitauan Island and Uson Island, where there are depths of 11 to 12.8m, mud.

The channel to this anchorage is unmarked and should not be attempted without local knowledge.

Uson Island (11°59'N., 120°10'E.) has an irregular coastline backed by hills. An isthmus connects the E and W parts of the island which is reef fringed and fronted by several islands. Port Uson lies between the N shore of Uson Island and the S shore of Baquit Island.

There are two channels leading into Port Uson. The approach channel is tortuous, has several scattered shoals, and is 7.3m deep. The preferred W approach channel is at least 0.2 mile wide with a least depth in the fairway of 16.5m and general depths of 24 to 27m.

Anchorage can be taken in Port Uson between Uson Island and Baquit Island, in a depth of 15 to 17m, mud.

Anchorage can also be taken in the NW part of Port Uson, N of Pinas Island.

10.31 Port Luyucan (11°59'N., 120°07'E.) is an inlet formed between the NE side of Apo Island and Busuanga Island. The entrance is about 137m wide and has a depth of 12.3m.

Anchorage can be taken, in depths of 7 to 15m, in the inlet, except in the area of a 2.3m shoal in the middle of the inlet.

Tangat Island (11°59'N., 120°04'E.) lies about 0.5 mile W of Apo Island. An above-water rock lies about 0.5 mile SW of the N extremity of Tangat Island. Lusong Island lies about 2.25 miles W of Tangat Island.

A dangerous wreck and a drying reef lie close S of **Lusong Island** (11°59'N., 120°01'E.).

The **Dipuyoy River** (12°01'N., 119°59'E.), emptying at the SW corner of Busuanga Island, has an irregular basin off its mouth, with depths of 7.3 to 14.6m.

The mast of a sunken wreck in the entrance to the river is a good landmark, although it has been reported to have been removed. There are several piers in ruins within the basin.

From the basin entrance off the Dipuyoy River, the coast leading NNW to **Detobet Point** (12°09'N., 119°51'E.) is irregular with few prominent points. Numerous small islands are scattered from a few meters to 8.5 miles offshore.

Conception (12°03'N., 119°58'E.) is a small town situated about 2 miles N of the mouth of the Dipuyoy River. The town schoolhouse is conspicuous. Small craft use the town landing at HW.

Salvacion (12°08'N., 119°56'E.), a small town, lies 5.25 miles NNW of Conception. The town has a pier about 47m long where boats may berth alongside at HW. The town schoolhouse is a good landmark. It can be easily identified from NW.

The church steeple is visible from SW over the tops of the trees.

10.32 Gutob Bay (12°10'N., 119°53'E.) is entered between Salvacion Island and Detobet Point. Depths at the entrance are 25.6m. Several above and below-water rocks and shoals lie in the bay. Depths in the bay range from 7.3 to 18.3m.

Gutob Anchorage (12°10'N., 119°52'E.) lies on the W side of Gutob Bay. The S entrance to the anchorage has depths of 29.3m and is marked by buoys. The N entrance to the anchorage is very constricted and has a depth of 9.6m. The E entrance to the anchorage has a least depth of 11.4m.

Gutob Anchorage, sheltered from all winds, has an area about 0.4 mile wide, and a depth of 16.5m in the middle.

Talampulan Island (12°06'N., 119°51'E.) lies about 1 mile SSW of Detobet Point. The island is encircled by a reef on which there are several rocks. Buoys mark the S and N ends of the reef line E of the island. A lighted radio mast, painted red and white, with several buildings nearby, is conspicuous from offshore.

Capare Island (12°08'N., 119°52'E.), a large island bordering the W side of Gutob Bay, is formed by a high ridge which is highest at the N end. The island is fringed by a reef and numerous rocks.

Two buoys mark the outer edges of the coastal reef, about 0.5 mile E of Detobet Point and 0.4 mile E of the same point.

10.33 Busuanga (12°09'N., 119°55'E.) ([World Port Index No. 59250](#)) is a small settlement on the E shore of Gutob Bay, just within the entrance to the Busuanga River. Small craft can cross the entrance bar at HW and berth alongside a stone pier.

Anchorage can be taken S of the town, in depths of 7.3 to 14.6m, mud. Several detached shoals lie 0.75 to 1.5 miles W of the river mouth.

West Nalaut Island (12°03'N., 119°47'E.) lies 6.5 miles SW of Detobet Point. The island is steep, rocky, and cliffy on its W side and is low, wooded, and sandy on its E side.

East Nalaut Island lies 2.5 miles ENE of West Nalaut Island. The island is small, rugged, and steep.

Pamalican Islands (12°05'N., 119°52'E.) consist of several small islets lying on detached coral reefs.

The islets appear as a cluster of trees. Shoals lie as far as 1 mile off the principal islet.

Horse Island (12°03'N., 119°54'E.) lies about 2.5 miles SSE of the Pamalican Islands. The island is wooded and fringed by reefs and shoals, which extend at least 1 mile offshore.

Maltatayoc Island lies about 0.5 mile W of Horse Island.

North Malbinchilao Island (12°01'N., 119°53'E.) lies 1 mile S of Horse Island. The island is joined to South Malbinchilao Island by a drying reef.

The coasts of the island consist of sandy beaches and rocky point.

Rat Island (12°01'N., 119°54'E.) is separated from North Malbinchilao Island by a constricted channel with a depth of 7.3m. A coral reef, about 0.4 mile in extent, lies 0.75 mile SE of Rat Island. The reef has several rocks, and a sand bar, awash, on its W and E ends.

Directions.—Coron Bay may be approached from NW by three routes, as follows:

1. **North of West Nalaut Island.**—From a position 0.9 mile NE of West Nalaut Island, steer 118° with the summit of North Malbinchilao Island ahead. When the hill on the W end of Maltatayoc Island bears 000°, alter course to 104° until the summit of Pass Island bears 146°, when it should be steered for, passing between North Malbinchilao Island and Rat Island on the W side and Malcatop Island (12°02'N., 119°55'E.) on the E side.

A good lookout should be kept for reefs on either side of the channel. When 1 mile from Pass Island, alter course to 094° with the 189m high hill on Busuanga Island ahead. When the summit of Darab Island bears 180°, course should be altered to 122°.

2. **South of West Nalaut Island.**—From a position 1.75 miles S of West Nalaut Island, steer 103° with the summit of Pass Island ahead, passing midway between Popototan Island and Manganguei Island. When the summit of Rat Island bears 000°, alter course to 078° with a 125m high hill on the SW extremity of Busuanga Island ahead, and kept so until the W extremity of Lajo Island bears 190°. Then alter course to 094° and proceed as described in 1 above.

3. **Between Popototan Island and Galoc Island.**—No directions are necessary for the channel between Popototan Island and Galoc Island. The channel is only 0.2 mile wide at its narrowest part.

10.34 The W coast of Butuanga, between **Detobet Point** (12°09'N., 119°51'E.) and **Macachin Point** (12°19'N., 119°54'E.), is very irregular and is fringed by a reef extending at least 0.5 mile offshore.

A small cove, formed by a break in the reef, indents the coast about 5 miles from Detobet Point.

Buluang (12°14'N., 119°52'E.), a settlement, is located at the head of the cove which is exposed to W winds.

Coral reefs restrict the navigable area of the cove to 0.3 mile with clear depths of 11m in the middle. Small vessels use the cove.

Illultuk Bay (12°16'N., 119°53'E.) lies about 7.5 miles NNE of Detobet Point. Depths in the bay decrease regularly from 15.5 in the entrance to 5.5m one mile from its head.

A small pier, with a depth of 0.6m at its outer end, lies on the N side of the bay near its entrance. There is anchorage for vessels with local knowledge, 1.25 miles within the entrance, in depths of from 11 to 13m, mud.

Elinibinid Point (12°19'N., 119°52'E.), the NW extremity of Busuanga Island, is low, rocky, and fringed by a coral reef for at least 0.1 mile.

Pinnacle Rock lies about 1.3 miles NW of Elinibinid Point. Vessels are cautioned not to pass inshore of Pinnacle Rock.